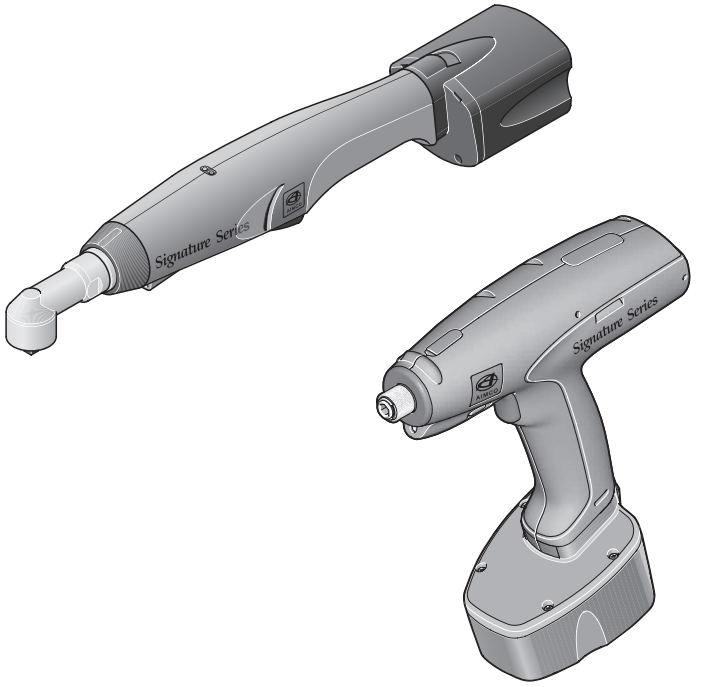
AIMCO

Signature Series

CORDLESS TOOLS



OPERATIONS MANUAL

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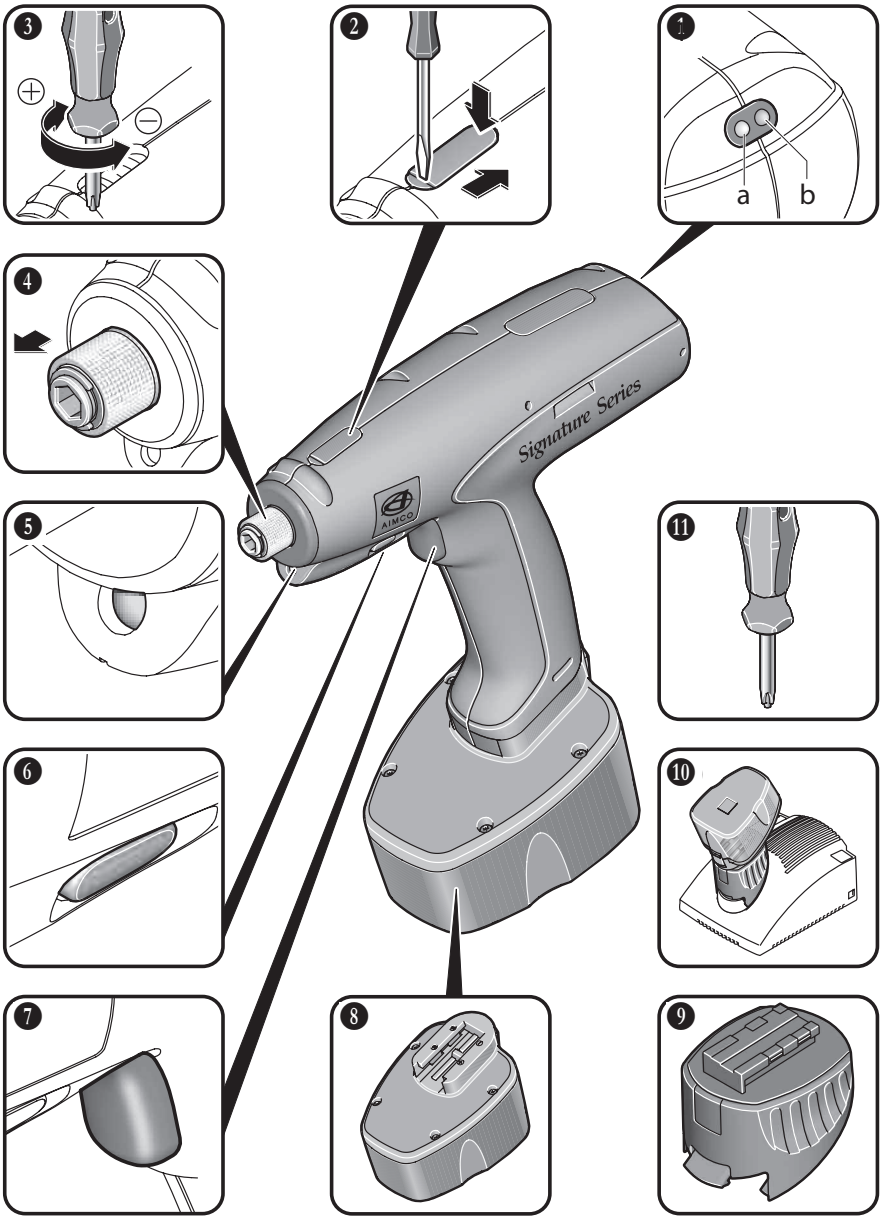
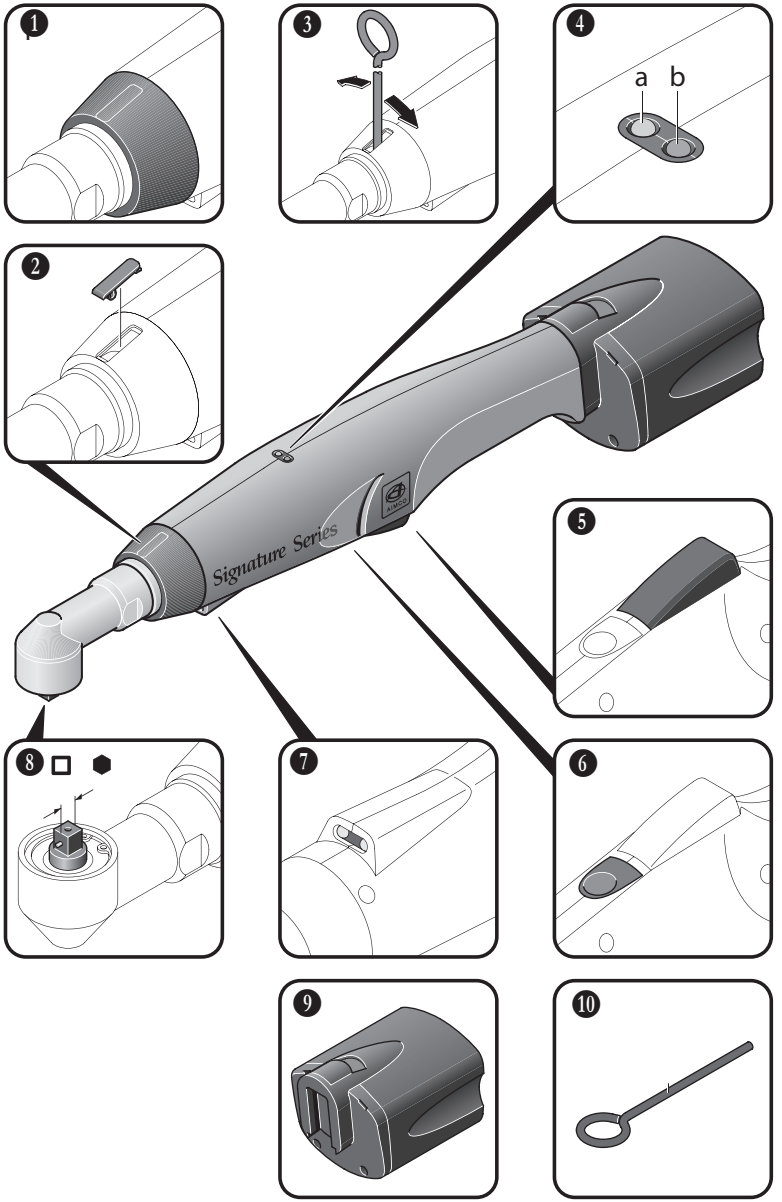
PISTOL MODEL



ANGLE MODEL



Thank you for your purchase of a Signature Series Precision Clutch Cordless Tool from AIMCO. The Signature Series follows the concept of PERQ™ adding to your company's Productivity, Reliability, Ergonomics and Quality demands as part of the most comprehensive line of assembly tools available from a single source worldwide.

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GENERAL SAFETY GUIDE

Do not use this tool before you have completely read and understood this Operations Manual, the Operations Manual for the associated Battery Charger, and any Signature Series Accessories Manuals intended for use with this tool.

Please observe all relevant local safety practices including the use of eye and ear protection.

This manual should be kept in an accessible location for later use and passed along to any new users.

Secure the workpiece firmly. A workpiece that is gripped tightly by a holding device or immobilized is more secure than if held by hand.

Hold tool securely in the hand prior to activating the trigger. It is possible that an inertial reaction may occur on some applications.

Do not screw, rivet, or engrave nameplates or signs onto tool housing. Should the tool

housing become damaged, its insulating properties could become adversely effected, causing a potential for shock. The use of labels for identification purposes is recommended.

Ventilation slots in tool housing should be kept clean. Accumulation of metallic dust can cause an electrical hazard and reduce the performance of the tool.

Always remove the battery from the tool before commencing any work on the tool itself or transporting it. This will eliminate the possibility of the tool starting unintentionally.

DO NOT OPEN THE BATTERY. The battery is nonuser serviceable and should be recycled in accordance with local regulations. Contact your AIMCO Signature Series dealer for assistance in locating recycling programs in your area.

Do not throw the battery into a fire or expose it to high temperatures. As with any battery, this can lead to an explosive condition.

Never look directly into the LED lights of the power tool or shine it into other's eyes as this could be harmful to someone with light sensitivity.

SIGNATURE SERIES TOOL COMPONENTS

LED DISPLAY

GREEN LIGHT (❶a on Pistol Model, ❹a on Right Angle Model)

- **Illumination after cycle completion** indicates a torque has been delivered and the clutch has successfully shut off the tool
- **Flashing Green in combination with Red** indicates counter clockwise (CCW) rotation is activated

RED LIGHT (❶b on Pistol Model, ❹b on Right Angle Model)

- **Illumination without an audible beep** indicates that the trigger was activated while the battery was being installed onto the tool. The tool will not activate until the light has gone out. Should the light remain lit, this is an indication that the trigger switch requires service
- **Illumination of the light *accompanied* by an audible beep** indicates that the tool has stopped running without torque delivery and successful clutch shut off. The tool may be restarted immediately to either retry the same application or to proceed on to a new one.
- **Flashing once per second** indicates that the battery is too low to accomplish tightening functions and needs to be re-charged.
- **Flashing twice per second** indicates that the tool has overheated and the protection circuit is engaged. After cooling, the tool will once again be ready for operation. Should the overtemperature circuit be activated repeatedly in a short time, the tool should be examined by an authorized AIMCO Signature Series repair center. As with any electric tool, overheating may be caused by use in excess of its duty cycle. 20 - 25 fastenings per minute is a good guide for electric tool duty cycles. This is only a guide, as the specific application will determine the actual working load of the tool.

TORQUE ADJUSTMENT

Each Signature Series tool is built with a precision clutch and is adjusted by use of the supplied adjustment tool. This insures that unauthorized changes in torque settings do not occur.

The adjustment on each Signature Series clutch will increase or decrease the torque output of the tool in a relative manner. To insure that the precise torque delivery features of the tool are optimized, it is recommended to use an Auditor® Series desktop torque tester to verify the setting of the tool once an adjustment has been made. This will insure that the amount of torque being output by the tool is known prior to putting the tool into service and checked at regular intervals according to plant procedures.

Torque Adjustment: Pistol Models (SPC-P-2, SPC-P-4, SPC-P-6, SPC-P-9, SPC-P-9H)

- Requires use of supplied Adjustment Tool (⓫)
- Run tool on Torque Tester, such as Auditor® UET Series, to determine existing torque output of tool.
- Open sliding door by depressing rear end of the door (away from driving bit) and sliding door towards the rear of the tool. (❷)
- Once door is open, rotate bit until tab is visible for adjustment tool to fit in.
- Rotate adjustment tool clockwise (CW) to increase torque output, or counter clockwise (CCW) to decrease torque output. (❸)
- Run tool on Torque Tester, such as Auditor® UET Series, to determine torque output of tool after adjustment.
- Repeat procedure until desired torque output has been set into the tool clutch.
- Close sliding door (❷) and return adjustment tool to secure location.

Torque Adjustment: Right Angle Models (SPC-R-16, SPC-R-25)

- Requires use of supplied Adjustment Tool (⓾)
- Run tool on Torque Tester, such as Auditor® UET Series, to determine existing torque output of tool.
- Remove adjustment window cap (❷)
- Once window is open, rotate collar until tab is visible for adjustment tool to fit in.
- Rotate adjustment tool clockwise (CW) around the tool axis to increase torque output or counter clockwise (CCW) around the tool axis to decrease torque output. (❸)
- Run tool on Torque Tester, such as Auditor® UET Series, to determine torque output of tool after adjustment.
- Repeat procedure until desired torque output has been set into the tool clutch.
- Replace window cap (❷) and return adjustment tool to secure location.

QUICK CHANGE CHUCK/ANVIL

Each Signature Series tool performs to its optimal level when used in combination with industrial quality bits/sockets from AIMCO.

Pistol Models (SPC-P-2, SPC-P-4, SPC-P-6, SPC-P-9, SPC-P-9H)

- Each Pistol Model Tool contains a ¼" Quick Release type chuck (❹) accepts standard ¼" Power Drive style driving bits

Right Angle Models (SPC-R-16, SPC-R-25)

- Each Right Angle Model Tool contains a 3/8" Square Drive anvil (❽) for use with industrial grade sockets. The tool anvil has a spring loaded locking pin for socket retention. To install or remove the driving socket from the tool, depress the locking pin slightly with a pick or other device to enable the socket to go onto or come off of the tool.

WORKPIECE LIGHTS

Each Signature Series tool contains built-in LED lights that illuminate the workpiece to assist the operator.

- Pistol Model Tools contain lights (❺) that activate when trigger is depressed halfway. These lights remain illuminated throughout the fastening cycle.
- Right Angle Model Tools contain lights (❼) that illuminate when depressing the trigger halfway to maximize battery life. Once the tool begins the tightening cycle, these lights shut off automatically.

TRIGGER

To start the fastening cycle, depress the trigger completely (❼ on Pistol Model Tools, ❺ on Right Angle Model Tools)

To activate the LED lights only, depress the trigger halfway (❼ on Pistol Model Tools, ❺ on Right Angle Model Tools)

ROTATION SELECTION SWITCH (❻)

To change the direction of rotation, simply depress the rotation direction switch. This will cause the tool to switch from clockwise (CW) to counter clockwise (CCW) rotation for one activation of the trigger. Once the trigger is released, the tool will automatically return to clockwise (CW) rotation insuring that the tool is ready to be productive at all times.

Pistol Models (SPC-P-2, SPC-P-4, SPC-P-6, SPC-P-9, SPC-P-9H)

- Rotation Selection Switch is located in front of trigger and is built as a pair to accommodate right or left handed operators (❻)

Right Angle Models (SPC-R-16, SPC-R-25)

- Rotation Selection Switch is located in a recess in front of trigger. Button is recessed to avoid accidental activation (❻)

BATTERY (❽ on Pistol Model Tools, ❾ on Right Angle Model Tools)

Slides on or off the tool after depressing the release clip at the rear of the battery. Tools designed for 12V power will not accept 9.6V batteries and tools designed for 9.6V power will not accept 12V batteries. This is accomplished by the battery mount design that does not allow the incorrect battery to be installed onto the tool.

ADAPTER

The Signature Series battery charger requires an adapter to accept both the 9.6V and 12V batteries in NiCad or NiMH types (❾ on Pistol Model Diagram, same adapter for all types of tools). The supplied adapter fits all Signature Series batteries. Be sure that the adapter is installed onto the charger prior to attempting to charge the battery.

BATTERY CHARGER

Use only Signature Series charging stations to recharge the battery.

OPERATING INSTRUCTIONS

CHARGING THE BATTERY

Prior to charging the battery for the first time, please read and understand this manual and the associated manual for the Signature Series battery charger being used.

The battery will require charging prior to being used for the first time. The first charge should take approximately one hour to complete. A new battery will not reach its full capacity until several charging/discharging cycles have occurred. Avoid "topping" off a charged battery to maximize its service life and use the battery until it has discharged, prior to putting it back on the charger. The battery is completely discharged when the tool's Red LED light is constantly on.

If the tool will not be put into use for an extended period of time (1 week or longer), remove the battery from the tool. This will prevent the battery from becoming too low and potentially damaging the battery.

RUNNING THE TOOL

Engage the bit/socket onto the fastener. Depress the trigger completely and maintain contact with the fastener during the complete rundown. The tool will shut off automatically upon activation of the precision clutch at its preset torque delivery.

Illumination of the Green LED indicates that the fastening operation is complete.
Illumination of the Red LED light and an audible beep sound indicate that the precision clutch did not reach its set torque output and that a problem occurred in the fastening process.

*Failure of the tool to run is an indication that the battery does not contain a sufficient charge or is incorrectly installed onto the tool. A **solid Red LED light** indicates a low battery while **no LED lights** indicate a poorly connected battery.*

MAINTENANCE AND REPAIR

Signature Series tools contain few user serviceable parts and are designed to be low maintenance. The following are recommended maintenance procedures to be performed once per week or more often in high usage applications:

- Visually check to be sure that battery contacts are clean. Should cleaning be required, the use of a non-residue, electrical contact cleaner is recommended.
- Visually inspect the tool housing to insure that no cracks or degradation of the material is evident. Should cracking or deep abrasion be noted, please send the tool to an authorized AIMCO Signature Series service center for estimate and repair.
- Lubrication of the gearbox is recommended after the installation of 250,000 fasteners with the tool.
  - Lubrication should only be performed after reading and understanding the tool parts list and assembly diagram. (Separate document)
  - Remove Phillips screws (part #9) from the tool handle and carefully separate the housing to expose clutch and gear assemblies. Remove each assembly (clutch and gear set) from handle assembly.
  - Add light coating of black moly type grease (Shell Alvonia #2, Mobil Plex 2, MobilPlex 47 or Chevron Moly Grease #2) to Planetary Gear Set. Be sure to lightly coat gear surfaces and not overlubricate as a reduction in tool performance will occur.
  - Add light coating of grease to ball bearings in clutch assembly at Cam Ring (part #50).
  - Be certain to replace any worn or damaged parts discovered with the assistance of a local AIMCO Signature Series Service Center
  - Reassemble tool in reverse order of above and test.

All other items on the tool are nonuser serviceable. Any repairs should be directed to an authorized AIMCO Signature Series repair center for estimate and repair.

ACCESSORIES

Use only authorized AIMCO Signature Series Accessories.

WARRANTY

NEW TOOL AND ACCESSORY WARRANTY

Any new tool or accessory branded with the AIMCO, Uryu, AcraDyne or Eagle Industries name, and purchased from AIMCO, or through one of its authorized distributors or agents, is warranted to the original buyer against defects in materials and workmanship for a period of one (1) year* from date of delivery. Under the terms of this warranty, AIMCO agrees without charge to repair or replace, at its option and F.O.B. its authorized service centers, any product or accessory warranted hereunder proving to AIMCO's satisfaction to be defective as a result of defective workman-ship or material. In order to qualify for this warranty, written notice to AIMCO must be given immediately upon discovery of such defect, at which time AIMCO will issue an authorization to return the tool. The defective item must be promptly returned to an authorized AIMCO service center with all freight charges prepaid.

REPAIRED TOOL WARRANTY

Once a tool is beyond the new product warranty period as detailed above, AIMCO will provide repair subject to the following warranty periods: pneumatic tools: 90 days*; electric tools and Acra-Feed: 90 days; battery tools: 30 days*; DC Electric tools: 90 days*

EXCLUSION FROM WARRANTY

This warranty is valid only on products purchased from AIMCO, or thru its authorized distributors or agents. AIMCO shall have no obligation pursuant to the AIMCO Warranty with respect to any tools or accessories which in AIMCO's sole judgment have been altered damaged, misused, abused, badly worn, lost or improperly maintained. This Warranty is null and void if the customer, or any other person other than an authorized representative of AIMCO, has made any attempt to service or modify the tool or accessory prior to its return to AIMCO under this Warranty.

The warranty provision with respect to each such product may be amended by AIMCO from time to time in its sole discretion. The liability of AIMCO hereunder shall be limited to replacing or repairing, at its option, any defective products which are returned F.O.B. to AIMCO or, at AIMCO's option, refunding the purchase price of such products.

AIMCO reserves the right to make periodic changes in construction or tool design at any time. AIMCO specifically reserves the right to make these changes without incurring any obligation or incorporating such changes or updates in tools or parts previously distributed.

THE AIMCO WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND AIMCO EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY SETS FORTH THE SOLE AND EXCLUSIVE REMEDY IN CONTRACT, TORT, STRICT LIABILITY, OR OTHERWISE.

THIS WARRANTY IS THE ONLY WARRANTY MADE BY AIMCO WITH RESPECT TO THE GOODS DELIVERED HEREUNDER, AND MAY BE MODIFIED OR AMENDED ONLY BY A WRITTEN INSTRUMENT SIGNED BY A DULY AUTHORIZED OFFICER OF AIMCO.

LIMITATION OF LIABILITY

AIMCO'S LIABILITY PURSUANT TO WARRANTY OF THE PRODUCTS COVERED HEREUNDER IS LIMITED TO REFUND OF THE PURCHASE PRICE. IN NO EVENT SHALL AIMCO BE LIABLE FOR COSTS OF PROCUREMENT OF SUBSTITUTE GOODS BY THE BUYER. IN NO EVENT SHALL AIMCO BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL OR OTHER DAMAGES (INCLUDING WITHOUT LIMITATION, LOSS OF PROFIT) WHETHER OR NOT AIMCO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS, HOWEVER CAUSED, WHETHER FOR BREACH OR REPUDIATION OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE OR OTHERWISE. THIS EXCLUSION ALSO INCLUDES ANY LIABILITY WHICH MAY ARISE OUT OF THIRD PARTY CLAIMS AGAINST BUYER. THE ESSENTIAL PURPOSE OF THIS PROVISION IS TO LIMIT THE POTENTIAL LIABILITY OF AIMCO ARISING OUT OF THIS AGREEMENT AND/OR SALE.

Note: The AIMCO Warranty confers specific legal rights, however some states or jurisdictions may not allow certain exclusions or limitations within this warranty.

* Note: All warranty periods addressed herein are determined using a standard shift, eight-hour work day.

DECLARATION OF CONFORMITY

AIMCO, with its manufacturing partner, declares that the product conforms to the relevant provisions of the standard as outlined by the following:

CE

EN 60745, EN 55014, 98/37/EG, 89/336/EWG

AIMCO

POWER TOOLS

DC CONTROLLED FASTENING TOOLS

TORQUE MEASUREMENT SYSTEMS

ASSEMBLY SYSTEMS

TOOL SUPPORT SYSTEMS

FASTENER TOOLS

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